

contract a superseding right to acquire or install any wiring. In any case, a tenant's right to own, acquire or install wiring should be governed by state property law and the terms of the tenant's lease.

Conclusion

The Commission should recognize that it lacks jurisdiction to order the owners of multi-unit buildings to allow telecommunications providers to emplace their facilities on private property and that, in any event, there are sound and persuasive reasons why the Commission should not attempt to regulate access to multi-tenant buildings.

Accordingly, the Commission should (i) decouple the access-to-property and the demarcation-point issues in its NPRM, (ii) abandon any attempt to deal with access to private property, and (iii) adopt rules for the specific demarcation point and other wiring issues raised by the NPRM that reflect the realities of the diverse physical and market characteristics of multi-tenant

buildings.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "William Malone", written over a horizontal line.

Nicholas P. Miller
William Malone
Matthew C. Ames

MILLER, CANFIELD, PADDOCK AND
STONE, P.L.C.
1225 Nineteenth Street, N.W., # 400
Washington, D.C. 20036-2420
TP: (202) 785-0600
FAX: (202) 785-1234

Attorneys for
Building Owners and Managers Asso-
ciation International, National
Multi-Housing Council, National
Apartment Association,
National Realty Committee,
National Association of Home Builders,
and Institute of Real Estate Management

Of Counsel:

Joseph F. Galvin
Michael C. Fayz
MILLER, CANFIELD, PADDOCK AND STONE, P.L.C.
150 West Jefferson St., Ste. 2600
Detroit, Michigan 48226

Gerard Lavery Lederer
Vice President --
Government and Industry Affairs
Building Owners and Managers Assn Int'l
1201 New York Ave., N.W., Ste. 300
Washington, D.C. 20005

Roger Platt
Deputy Counsel
National Realty Committee
1420 New York Ave., N.W., Ste. 1100
Washington, D.C. 20005

Rhonda L. Daniels
Senior Counsel
National Association of Home Builders
1201 Fifteenth Street, N.W.
Washington, D.C. 20005-2800

March 18, 1996

Attachments:

1. Anti-Deficiency Act, 31 U.S.C. § 1341
2. Excerpts from Local Competition Report (Feb. 5, 1996).
3. Articles on commercial real estate from CIO, Crain's New York Business, Forbes ASAP, Metropolis, New York, and The New York Times.
4. "The Future of the Apartment Industry"
5. Declaration of Lawrence G. Perry, AIA

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UNITED STATES CODE ANNOTATED
TITLE 31. MONEY AND FINANCE
SUBTITLE II--THE BUDGET PROCESS
CHAPTER 13--APPROPRIATIONS
SUBCHAPTER III--LIMITATIONS, EXCEPTIONS, AND
PENALTIES

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Current through P.L. 104-98, approved 1-16-96

§ 1341. Limitations on expending and obligating amounts

(a)(1) An officer or employee of the United States Government or of the District of Columbia government may not--

(A) make or authorize an expenditure or obligation exceeding an amount available in an appropriation or fund for the expenditure or obligation;

(B) involve either government in a contract or obligation for the payment of money before an appropriation is made unless authorized by law;

(C) make or authorize an expenditure or obligation of funds required to be sequestered under section 252 of the Balanced Budget and Emergency Deficit Control Act of 1985; or

(D) involve either government in a contract or obligation for the payment of money required to be sequestered under section 252 of the Balanced Budget and Emergency Deficit Control Act of 1985.

(2) This subsection does not apply to a corporation getting amounts to make loans (except paid in capital amounts) without legal liability of the United States Government.

(b) An article to be used by an executive department in the District of Columbia that could be bought out of an appropriation made to a regular contingent fund of the department may not be bought out of another amount available for obligation.

CREDIT(S)

1983 Main Volume

(Pub.L. 97-258, Sept. 13, 1982, 96 Stat. 923.)

1996 Pocket Part

(As amended Pub.L. 101-508, Title XIII, s 13213(a), Nov. 5, 1990, 104 Stat. 1388-621.)

A Look At Network Statistics

Company Name	Total Route Miles	Total Fiber Miles	Number of Buildings Connected	Number of Customers	Number of Switches Deployed	Number of Switches To Be Added in 1996
Teleport Communications Group	5,065	n/a	3,100	wnd	21	10
MFS Communications Co. Inc.	2,909	185,999	4,458	32,000	13	none
MCImetro	2,338	wnd	wnd	wnd	10	wnd
Cox Communications *	1,200	32,000	110	60	0	2
InterCom Group Inc.	827	27,150	280	wnd	13	2
Time Warner Communications	800	25,000	wnd	wnd	1	4
GST Telecommunications Inc.	570	10,130	154	100	2	12
Brooks Fiber Properties	506	26,796	400	wnd	3	10
Intermedia Communications	484	16,533	363	10,658	15	45
NEXTLINK	468	wnd	wnd	wnd	2	wnd
Eastern Telelogic Corp.	400	5,000	wnd	wnd	wnd	wnd
Kansas City FiberNet	350	10,000	100	50	0	1
KMC Southeast Corp.	320	wnd	65	wnd	0	1
Electric Lightwave Inc. ¹	225	20,469	157	216	wnd	wnd
McLeod Inc.	225	6,896	137	9,000	1	wnd
Metro Access Networks Inc.	140	3,500	35	wnd	0	2
American Communications Services Inc.	136	5,957	100	wnd	0	1
FiberSouth Inc.	100	6,000	100	wnd	0	0
LinkaTel of California	80	4,000	wnd	wnd	0	1

Access Telecommunications Inc., Hyperion Telecommunications, Jones Lightwave Ltd., LOCATE, Media One, NEXTLINK, Pacific Linktel, Phoenix FiberLink, U.S. Networks and WinStar Wireless did not respond to our queries.

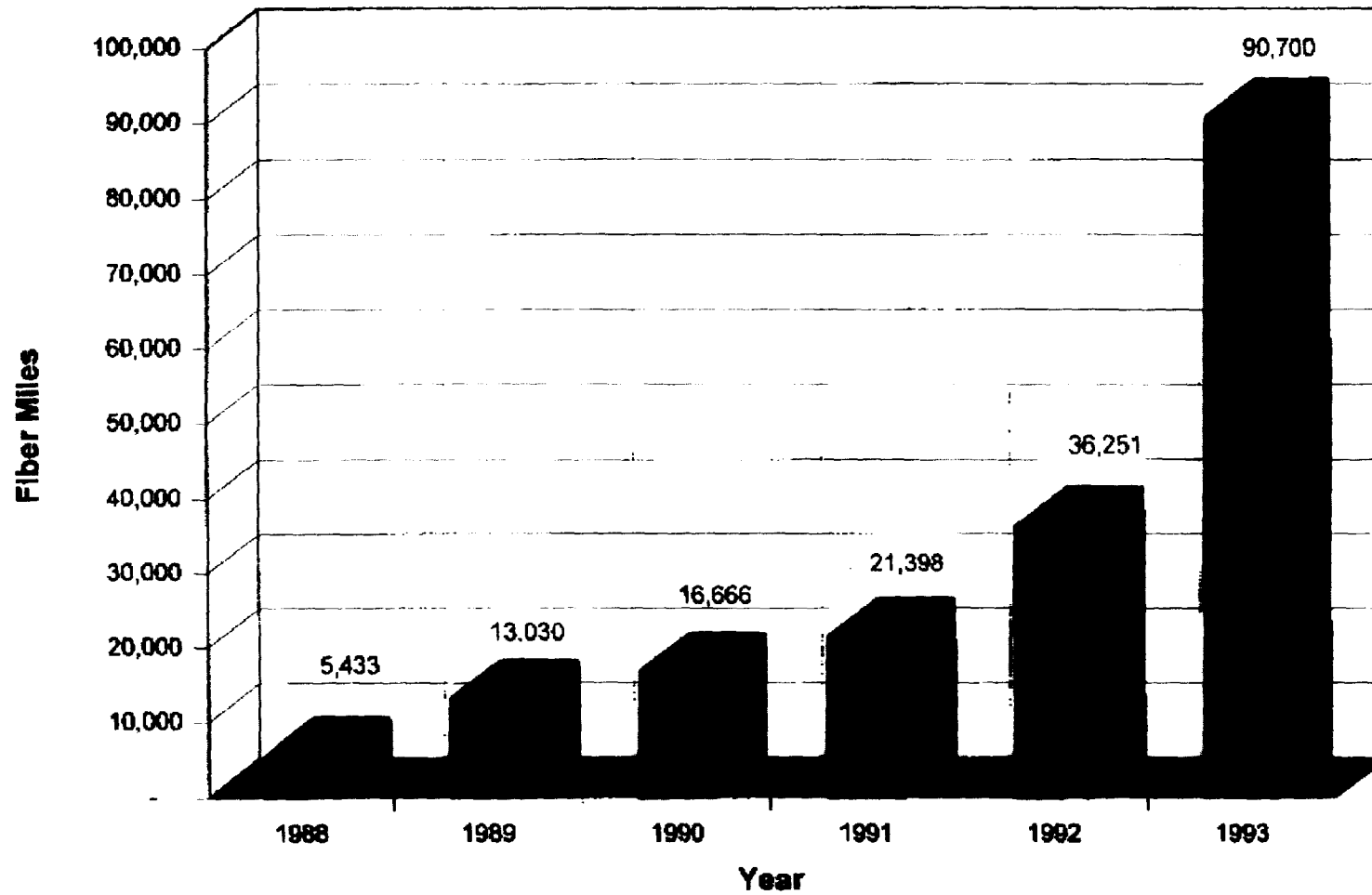
* Affiliate of Teleport Communications Group.

n/a - not applicable wnd - would not disclose

1 - Accurate as of July 1995. ELI would not disclose more current numbers.

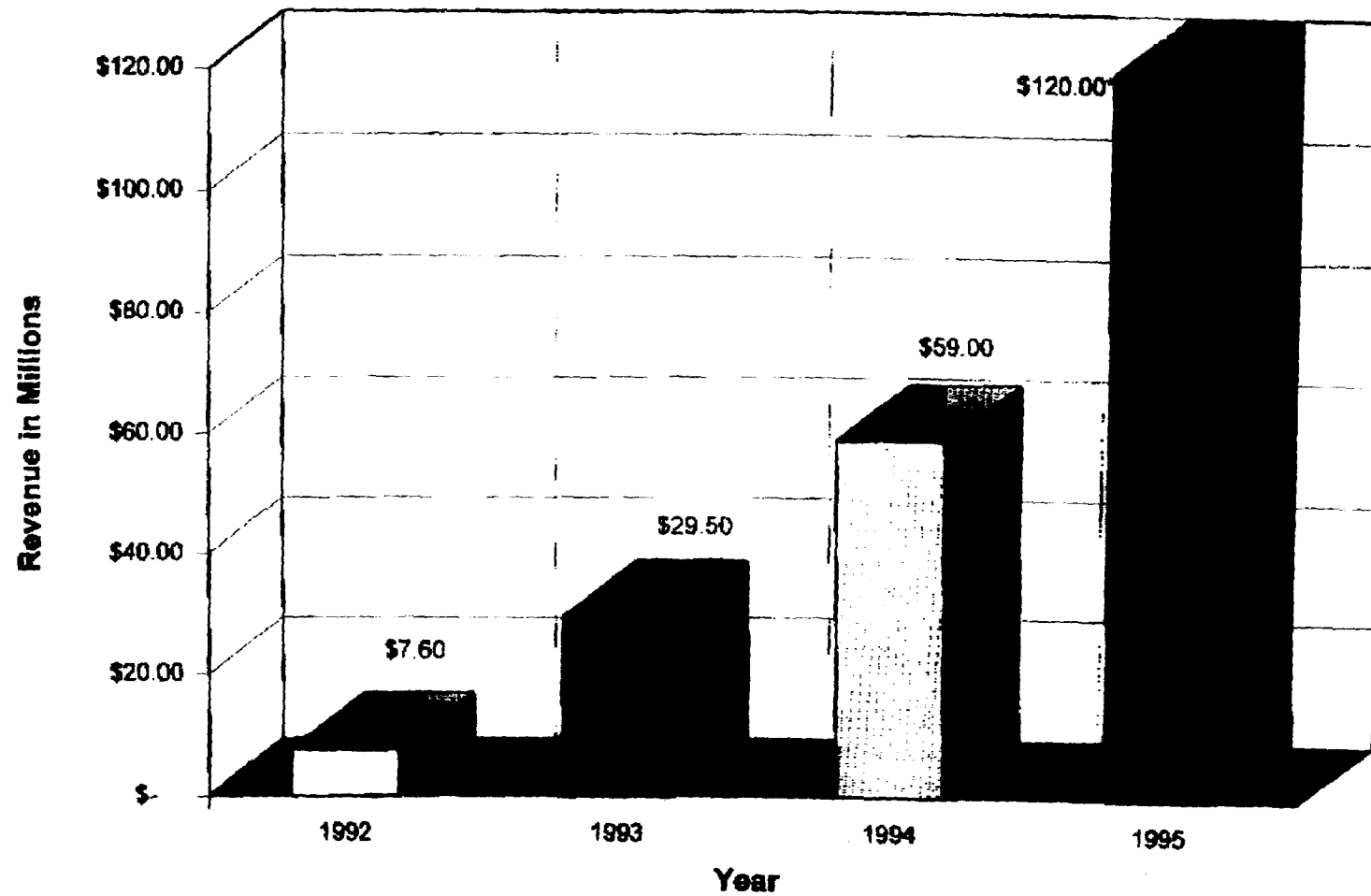
Sources: Individual companies

Teleport Communications Group (TCG) Fiber Deployment



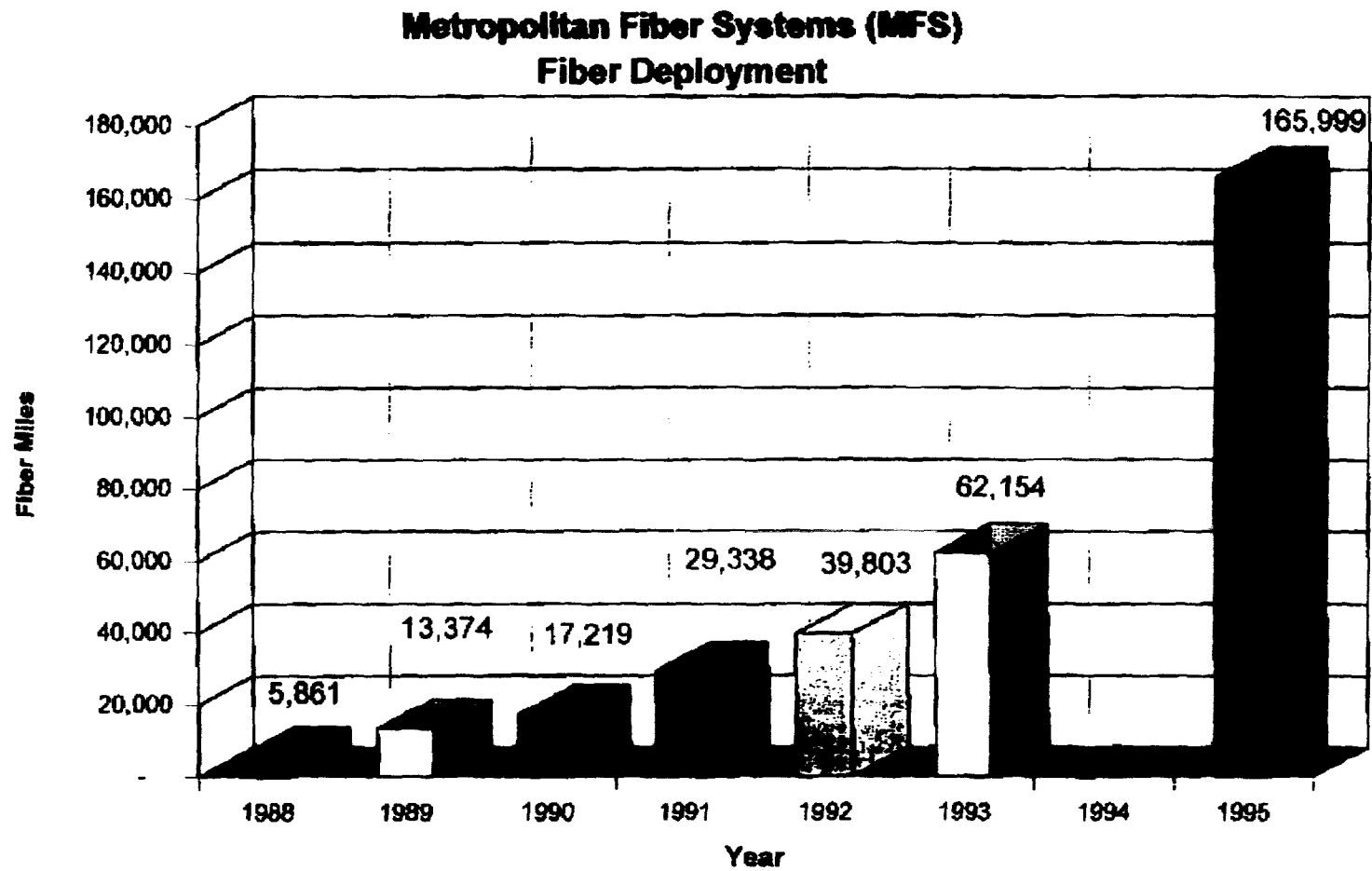
Source: FCC Fiber Deployment Update 1993

**IntelCom Group Inc. (ICG)
Total Revenue**



Source: Telecom Publishing Group, Local Competition Report

*Projected Revenue for 1995 Fiscal Year

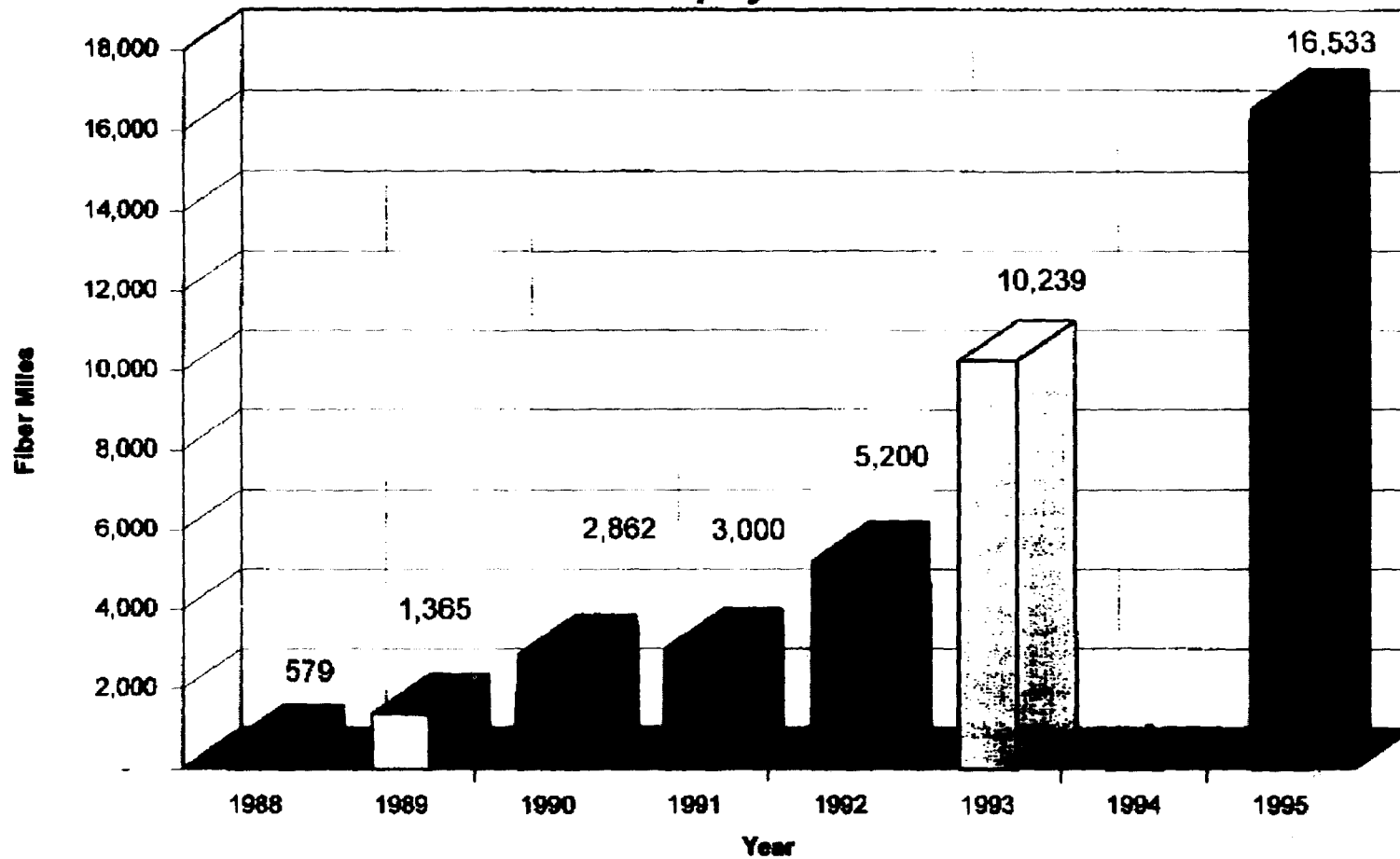


Source 1988-1993: FCC Fiber Deployment Update 1993

Source 1994: Data Unavailable

Source 1995: Telecom Publishing Group, Local Competition Report, February 5, 1996

Intermedia Communications Fiber Deployment

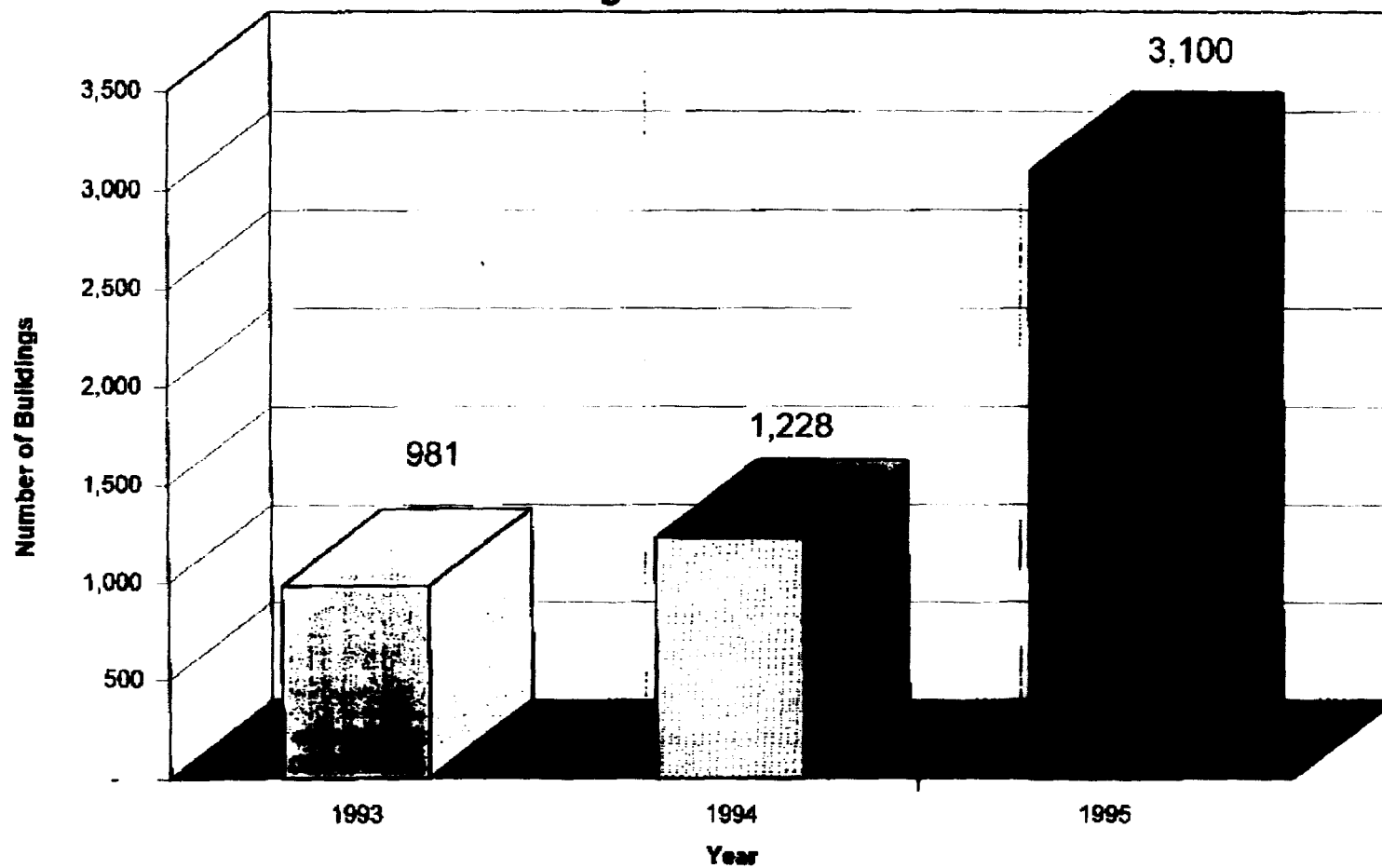


Source 1988-1994: FCC Deployment Update 1993

Source 1994: Data Unavailable

Source 1995: Telecom Publishing Group, Local Competition Report, February 5, 1996

Teleport Communications Group (TCG) Buildings in TCG Network



Source 1993-1994: Telecom Publishing Group, Local Competition and Regulation, 1994

Source 1995: Telecom Publishing Group, Local Competition Report, February 5, 1996

TRENDS

SMART BUILDING

SILICON @ ALLEY

Lower Manhattan's financial district may soon become a mecca for high-tech as well as high finance if real estate developer Rudin Management Co. Inc. has its way. New York-based Rudin has nearly completed a \$15 million project to convert an outdated building into a state-of-the-art center for emerging new-media companies.

Located at 55 Broad St., the New York Information Technology Center (NYITC)

offers the latest and greatest in communications technology.

With a mission of becoming the nerve center of New York's IT industry, the 31-story NYITC is outfitted with fiber-optic and high-speed copper wire as well as ISDN and T-1 and fractional T-1 lines to enable Internet, LAN and WAN connectivity; voice, video and data transmission; and satellite accessibility.

Rudin is looking to attract up-and-coming high-tech companies, including multimedia software developers, hardware manufacturers and Internet service providers, that typically require such services. One of the first to sign a lease was N2K Inc., a Brooklyn software developer that manufactures Jazz Central Station, an interactive, CD-ROM-based jazz catalog.

Although most young companies wouldn't think of opening up shop in pricey Manhattan, they may want to reconsider. Rudin can afford to rent space in the NYITC at about \$15 per square foot—\$5 to \$10 less than the going downtown rate—thanks to property tax breaks afforded by the Lower Manhattan development project. After New York lost

nearly 100,000 jobs to layoffs and relocations, the city launched a revitalization plan for the financial district that includes tax abatements and reduced electricity costs for businesses locating in the area.

The NYITC is the first step in the developer's plan to create a new 24-hour community. Where vital new businesses go, retailers, restaurateurs—and, of course, revenues—will follow, Rudin believes.

The company is touting its endeavor as a prototype for buildings of the future and hoping that it will catch on in residential buildings. For more information, visit <http://www.55broadst.com>.

—Cheryl Davis

LINKS TO THE FUTURE

For a glimpse at tomorrow's technology, visit **The Argonne Computing and Communications Infrastructure Futures Laboratory** at http://www.mcs.anl.gov/FUTURES_LAB/index.html. This cutting-edge lab researches and prototypes next-generation computing and communications systems. The site includes online descriptions of current projects—including the Voyager project, billed as the technology that will "ultimately replace the types of servers that we currently use for supporting collaborative environments" and "provide an extensible environment for making audio, video and other stream-oriented recordings available to others on the network."

"History repeats itself" may well be the motto at Project Nostradamus, where a social science research team studies past and present patterns in mass psychology to predict the future. **Nostradamus 2000** (<http://www.nostradamus.com>), the group's online subscription service, offers predictions, general forecasts and analyses of political, social, financial and economic issues. The service promises to alert readers to potential financial expansions or collapses as well as domestic and world developments and social trends. Subscriptions start at \$35.

Want to learn more about scenario planning? Then check out the **Global Business Network** at <http://www.gbn.org/>. GBN is a leading think-tank for scenario planning, and its Web site is chock full of futuristic goodies, including advance proofs of business and economic books, chronicles of China in reform and Mexico in flux, and GBN's own scenarios for the possible futures of multimedia.

At **The Santa Fe Institute** (<http://www.santafe.edu/>), researchers and educators explore a broad array of topics including artificial life, the immune system, genetics, and nonlinear modeling and forecasting. The institute's Web site features a rich publications page with links to online scientific journals, including MIT Press's *Artificial Life Online*.



...I don't only have
...burton, and
...you want is
...want a
...press a
...want your
...with the pink
...clap
...no
...chemical
...My
...all
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City has to overcome old attitudes to nurture new media's potential

STEVE MALANGA



STANDING IN the basement of the Palais des Festivals in Cannes, Caitlin Curtin was very grateful to California.

Ms. Curtin, chief executive of Luminare, a new media firm based in San Francisco, was part of a group of 17 companies that made their mark at the international show Milia '96, with help from a state-coordinated program.

While in France, she participated in two meetings organized by the California Pavilion to tout her products. Her display space at the Palais, which otherwise could have run \$5,000, cost her just \$300.

The California initiative shouldn't surprise anyone who knows how technology has become critically important to the economy of that state. An array of industry and government groups have united to nurture it.

But while new media is growing in New York, too, there was no New

York Pavilion in Cannes, no official emissaries. That's too bad, because new media is ready for New York, even if our local governments aren't ready for it.

I saw this at the show, where I watched Bill Rudin, the developer responsible for the New York Technology Information Center, sell his project and the city.

A minister from the European Economic Commission was so impressed by the idea of a New York technology district that he wants to do something similar in Brussels. A steady stream of international companies said they are thinking of New York as their U.S. base.

Mr. Rudin is quick to credit Mayor Giuliani with recognizing the importance of the technology sector in his downtown revival plan. He adds that wheels are in motion to involve local government in efforts to strengthen the hold on this industry.

I hope he's right. But after watching city and state economic development officials for years, I know that even when they are moved to act, they are often stuck fighting the last war instead of preparing for the next.

Here, so much of the economic

development dollar goes to programs that try, often unsuccessfully, to shore up shrinking industries. It takes development officials, and their political bosses, years to recognize emerging industries.

California, by contrast, has moved quickly to leverage federal grants, money from industry groups and other sources.

Such bold initiatives are difficult in New York, which has often considered international trade development wasteful, if not downright unseemly. The last time the city sent someone to a trade show in France, to the 1992 Cannes film festival to drum up production business, the local press went wild. "Give up the limo, save the subway" *Newsday* roared. The mayor was so worried he canceled a similar visit two years ago.

But even without trying to sell New York in Cannes, the city's film industry has grown by 15,000 jobs. Just imagine what a more determined effort could have done.

Let's hope the local press shows more understanding about new media's potential. If they don't, maybe the mayor will display more courage and initiative than he did before.

CRAIN'S

NEW YORK BUSINESS®

Oct. 16-22, 1995

Rudin's high-tech building a plug for downtown plan

Bells and whistles draw the first firms to former home of Drexel Burnham

BY JUDITH MESSINA

"Just plug in," the tagline for the new Information Technology Center in downtown Manhattan, is grabbing the attention of high-tech companies as far away as the West Coast.

Plaid Brothers Software Corp., an Irvine, Calif.-based company that develops custom applications for major brokerages in New York City, was within days of signing a lease on other offices in the city when company officials heard about the center. It is now negotiating for 2,500 square feet in the 55 Broad St. building.

"Other buildings that we looked at had standard telecommunications, but the focus wasn't technology," says Scott Kozak, the controller of Plaid Brothers. "We would have been able to get the wiring we needed, but at additional cost and time."

Juiced by incentives

That plug-and-play potential is what the Rudin Management Co.—which owns the long-vacant headquarters of defunct investment house Drexel Burnham Lambert Inc.—is pushing, along with low rents, tax incentives and low-priced power from Consolidated Edison.

The centerpiece of the city's plan to attract high-tech companies and bring lower Manhattan back from the dead, the building has been outfitted with the latest technological bells and whistles. Those are draws for small start-ups that would otherwise have to shell out cash for expensive telecommunications hookups.

For example, Plaid Brothers estimates it would have cost \$9,000 to outfit space in another building to allow its computers to communicate with its Wall Street clients.

At 55 Broad St., those hookups are already wired into the building's infrastructure.

The Rudin organization has sunk \$15 million into running back-up power and several types of telecommunications facilities through 200,000 square feet of space on the first 11 floors of the 30-story building. Fiber-optic lines will transmit video, voice and data in and out of the building, and also provide an internal local area network over which tenants can communicate with each other.

Telecommunications companies need only bring their services into the core telecommunications room and the building's wires can distribute it to anyone who wants it. Satellite communications will provide for video conferencing. High-speed data lines will permit speedy access to the Internet.

"We have the ultimate bandwidth, getting as much information through wires as fast as possible," says William Rudin, president of Rudin Management.

Mr. Rudin is hoping that this high level of technology—no building has yet to offer such a comprehensive package—can attract the video and music production companies that populate New York's burgeoning multimedia industry, as well as movie studios, Internet-access providers and software developers.

And he's pitching the "Just Plug In" message anywhere techies and media types are likely to see it—a World Wide Web site on the Internet, ads in *Wired* magazine, CNBC and at the New York New Media Association's cybersuds monthly get-togethers. Thus far, Mr. Rudin has done deals with about nine companies that have filled three of the floors in the building, which is scheduled to open in November.

Tenants include one- and two-person shops, such as New York's InterCom Online Inc., an Internet-access provider that is taking 1,000 square feet. Another company, N2K (for Need To Know), is leasing 13,000 square feet.

HIGH-TECH ADDRESS

Information Technology Center features include:

- High-speed voice, video and data transmission.
- A local area network connecting tenants throughout the building.
- Connections to local and long-distance telephone service.
- Satellite communications for video conferencing and transmission of other visual material, such as X-rays.
- High-speed Internet access.

Mr. Rudin concedes that the payback won't come from tiny start-ups that need only a personal computer and a telephone wire. He's betting on attracting bigger companies with heavy-duty technical needs, and is planning to sink another \$10 million into the upper floors, the tower, starting next year. Rents in the tower will be a few dollars higher than the \$15 to \$17 per square foot that tenants will pay on the first 11 floors.

Betting on a plan

The developer is also betting on the resurgence of lower Manhattan, where Rudin has 2.5 million square feet of space, and on Mayor Rudy Giuliani's plan to turn the area into a high-tech center as well as a residential and retail haven.

Industry experts say that only time will tell if Mr. Rudin's bets on downtown will pay off and New York will become a center for high-tech companies.

"The market is deep enough to accommodate the available space in the building," says William Cohen, a broker at Newmark & Co. "We'll know in a very short period of time how deep the market is for (more high-tech space)."

ON A HILL

The telecom revolution should be bad news for the metropolis—and the worst news of all for New York. But it isn't. And with proper management, it won't be. by Peter Huber

IT'S ABOUT TO RAIN. You're standing at the corner of Park and 55th, a human semaphore, your right arm waving uselessly at the sky. There are empty cabs cruising the streets two blocks away—you know it. If your arm were just 150 yards longer, the connection would be made. This is a failure to telecommunicate.

Why are there still so many New Yorkers to hail cabs anyway? Before fiber-optic glass, asymmetric digital subscriber lines and the Internet, the answer was obvious. The grime and crime didn't matter. Legal, financial and intellectual talent flocked to the city regardless, because everyone else did, or already had or soon would. If you wanted to borrow a billion, or sell as much in stock, or wrap up the deal in legal paper or entertain around the world, the people you needed were just a cab ride away. You had to be there because they were. With today's tele-electronics, you don't.

LABYRINTH OF NETWORKS

If we were inventing the stock exchange from scratch today, it would not be a building in New York; it would be a far-flung, decentralized network, a sort of Internet of brokers, traders and principals. There is, indeed, a small, all-electronic futures exchange up and running on the Internet. Also on line are the interbank currency market (which dwarfs the stock market), Globex (an after-hours global electronic exchange for financial futures), Access (an after-hours global electronic extension of the New

York Mercantile Exchange) and Nasdaq, which markets itself as "the stock market for the next 100 years" (although twice in recent memory the entire system was brought down for several hours by a squirrel with a taste for telecom cables). Every financial, legal, pedagogical and entrepreneurial enterprise of any importance is being networked—first within offices, then across cities, then the networks themselves are networked, within cities and beyond.

Architecturally speaking, the Internet is the exact opposite of the traditional metropolis: it is urban sprawl carried to the electronic limit, a network of networks, with Aspen's and New York's granted equal dignity so far as the routing of bits and fortunes is concerned. The great traditional centers of capital and influence should be flattening out, the skyscrapers melting not just into New Jersey but into Kansas. The telecom revolution should be bad news for the metropolis—and the worst news of all for New York. But it isn't. And with proper management, it won't be.

New York begins, of course, with its inheritance. A trillion dollars of financial transactions move over New York's telephone lines every day. Over 13,000 corporations, huge and tiny, are headquartered in Manhattan alone. Capital Cities/ABC, CBS, NBC, and Fox Broadcasting are here. George Soros is here. One-third of all national cable networks are headquartered in the city or nearby, twice as many as in southern California. In the overall

film and TV industry, the city is second only to Los Angeles. New York has 100 sound studios, 100 sound stages, 60 camera lighting companies and 100 editing companies; all told, over 6,000 businesses support New York-area film and video production. Madison Avenue rustles up the advertising cash that supports most of broadcast. "The talent," in short, still shaves, models, dines, flatters and strokes in the city.

Countless millions of people across the country and around the world want a piece of New York talent, to invest in, bank with, trade through or just laugh at late on a Saturday night. That's the good news. The bad news is that those millions don't care—often don't even know—where the talent is performing. New York, Holly-



Photographs: Jay Marshall

wood, London...it doesn't matter, so long as the stock moves, the account clears, the bits sum up on the spreadsheet, the pixels light up entertainingly on the screen. If you could pick up New York's talent—the whole seething beehive—one Friday evening, and set it down in Aspen on Saturday, the money, the news and the laughter would still work their same magic around the globe come Monday morning.

POWER OF PROJECTION

Except that they wouldn't. Because the other thing the city still has far more of than anyone else is the raw, technical power to coordinate and project the talent, not via taxicab or Lutece, but from there on out, through glass, coaxial cable, microwave and satellite. What makes Bill Cosby funny is the whimsical software loaded in a few cubic inches of his skull; what makes him rich as Croesus is television. What makes New York rich is talent, too—plus the unequalled power to project talent electronically around the globe.

New York remains the unrivaled telecom hub of the planet today. All programming that originates in the Manhattan studios of the four major TV networks, all the programming for their national radio and cable net-

works, flows out from the city to the rest of the country over a vast ganglion of telecommunications that begins and ends in the heart of Manhattan. Before the distilled product goes out, an even larger torrent of raw information comes in, over equally capacious electronic facilities. In electromagnetic terms, the city is both a huge, quivering antenna—a giant receptor of telephone, radio and photonics—and also the brightest beacon on the planet, a cyber-quasar pumping out vast amounts of energy in the form of radio waves and glass-encapsulated laser light.

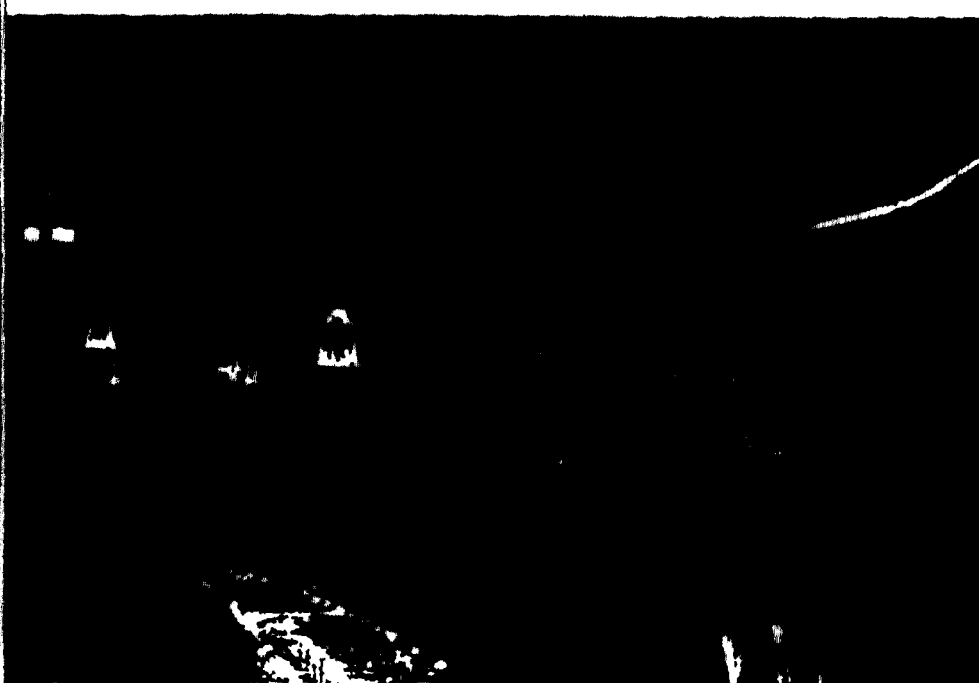
New York alone generates 5%—\$7.5 billion—of the country's \$150 billion telecommunications revenues. CBS's Manhattan-based newsgathering organization, for example, coordinates 105 remote satellite earth station "uplinks," which transmit video feeds from earth to satellite, and back down to Manhattan. Viacom, owner of MTV and Nickelodeon, and HBO both connect to satellites in geosynchronous orbit through earth stations on Long Island. Westinghouse-owned Group W Satellite Communications, the largest satellite video distribution company in the country, uses an earth station in Glenbrook, Long Island, to distribute programming for ABC, CBS, NBC, Fox, Japan Broadcasting, A&E,

the Discovery Channel and Viewer's Choice, and the private video networks of GE, IBM and GTE. IDB Communications, another major provider of satellite services, operates an earth station on Staten Island, a switching center in Manhattan and a satellite uplink on the World Trade Center. Through facilities like these, the city sucks in information from everywhere, processes it through human and electronic talent, adds value and then sends it back out around the globe.

Staying far out ahead of the telecom pack is not easy. It requires doubling the power and sophistication of your wires and transmitters about every two years. That's how fast the technology improves. That's how fast a contender can grab a technological edge, and then widen it and then aspire the talent. Almost a century ago, New York lost the movies because Hollywood offered better lighting—more sun. In 1975, Manhattan missed the first wave of cablecasting, because Ted Turner happened to live in Atlanta. Cable—a \$20 billion-plus industry today—was nothing until Turner transformed his small UHF station in Atlanta into a "superstation" by beaming the signal up to a satellite and then down to cable systems across the continent. Far more Americans love (or love to hate) the Yankees than the Braves; more people in Butte, Mont., would be interested in tuning in to "local" New York fare than "local" fare from Atlanta. The first superstations, and the whole satellite cable-casting industry they spawned, should therefore have been launched from New York. Somebody dropped the ball, and they weren't.

THE MIGHTY TELEPHONE

Happily for the city, however, lots of other things have gone right. A fortunate confluence of market forces and forward-looking regulatory policy has kept New York out ahead of the pack. So far, at least. In assessing the state of New York's telecom and where it's headed, the thing to understand first is that the telecom revolves around telephone, not televi-



The telecom revolves around telephone, not television. The sex and slaughter artists of Hollywood aren't that important.

sion. The sex and slaughter artists of Hollywood aren't that important. Television, with all its glitz, is about a \$26 billion market nationwide; cable another \$22 billion. Telephony, by contrast, generates about \$150 billion a year. Calls to 800 numbers alone generate some \$7.8 billion a year, or more than the total television revenues of CBS and NBC combined.

Though scarcely a decade old, and still growing at breakneck speed, cellular telephony is already an \$11 billion industry. Wealth—the city's, and everyone else's—depends far more on the two-way wires next to the sewers than on the one-way perturbations of the electromagnetic spectrum in the stratosphere. And in the vicinity of its sewers, New York is still doing very well indeed. The city's telecom subway, its underground spider-web of glass, coaxial cable and copper, is the best there is—a digital bullet train in a world that still relies mostly on horses. The telecom below is the one that really counts.

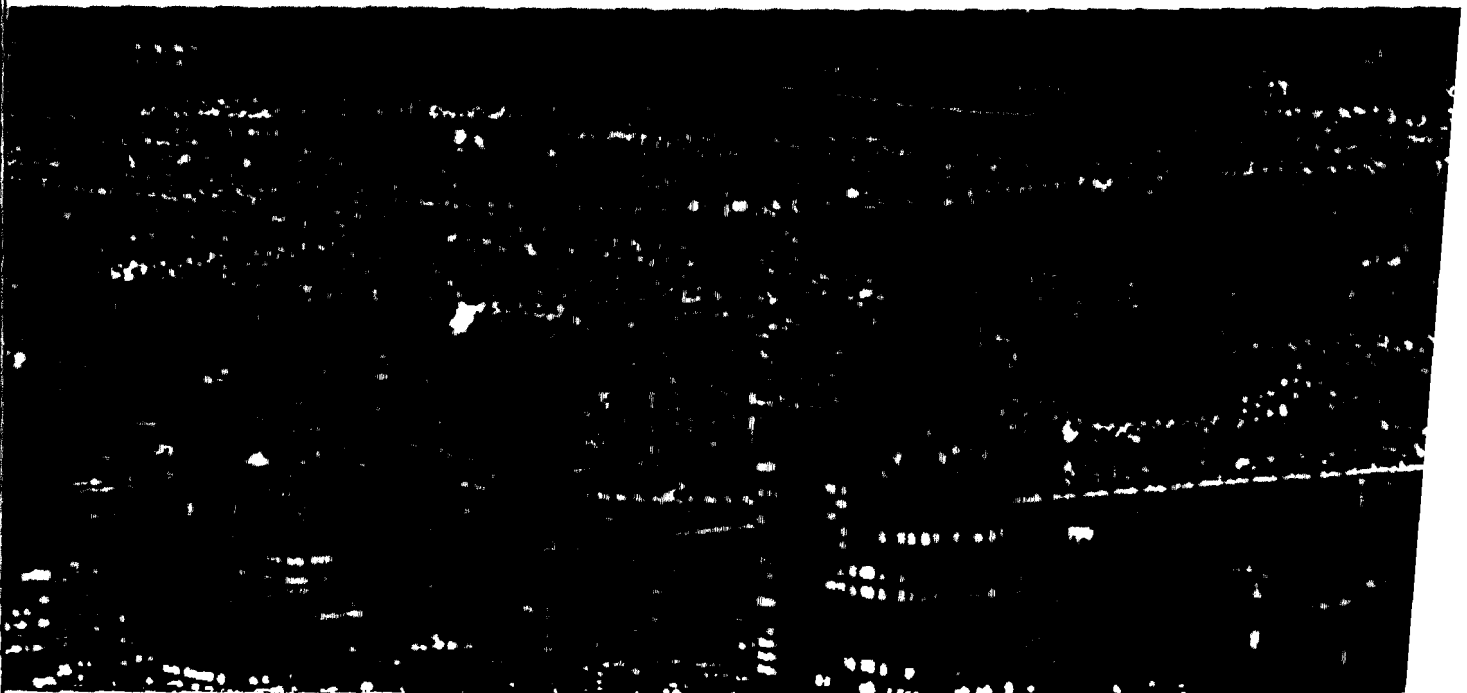
Bell's legatee, New York Telephone (recently renamed Nynex New York), is the oldest and still by far the largest provider of service in the city. But today it is by no means alone. In

1983, Merrill Lynch, Western Union and the Port Authorities of New York and New Jersey created the Teleport Communications Group to provide satellite uplinks for the region's financial institutions and broadcasters. TCG started with 17 satellite send-receive earth stations on Staten Island, linked by fiber-optic cable to downtown Manhattan. Large businesses, it turned out, were more interested in using the new cables to carry traffic within the city and to inter-exchange carriers like AT&T. A new, lucrative business sprang up, centered not on satellites but on building new, local, state-of-the-art networks in urban areas. TCG unloaded the dishes, and with \$50 million from Merrill Lynch, began to deploy more glass. This was the nation's first "Competitive Access Provider," or "CAP."

So far as entering the market and providing services go, these new, competing, local phone companies have all the privileges enjoyed by Nynex, the incumbent, including a right to interconnect with it. This is important. When competition between local phone companies was tried a century ago, it was a disaster. Competitors in the same town typically refused to

interconnect with each other; businesses often had to advertise that they had "both" telephone lines. It drove everyone nuts. Not this time around. Smart electronics make possible seamless call handoffs among any number of private switches, wire-line carriers, wireless carriers, CAPs, information providers, long-distance carriers, cable companies and satellite operators. And regulators are making sure that the handoffs are made, both coming and going. As a result, six companies have since been certified as local phone companies to compete against Nynex in providing service to the city. They include long-distance carriers (MCI), CAPs (TCG) and cable television operators (Time Warner and Cablevision Systems).

It's easier to start a phone company in the city than to start driving a cab. There is no exclusive franchise, no \$100,000 medallions. Each new competitor can pick up or hand off digital passengers at literally thousands of transfer points scattered like confetti in closets, basements and tunnels the length of the island. Competition has not hit the residential sector yet, but it soon will, spearheaded by the cable TV industry. Your cable company will



It's easier to start a phone company in the city than to start driving a cab. There is no exclusive franchise, no \$100K medallions.

offer two-way phone service along with one-way video. Time Warner/US West have already announced 1995 plans to do just that over Time Warner's cable affiliate in Rochester. Time Warner (a \$15 billion-a-year concern, compared to Nynex's \$13 billion) has been granted the right to provide local service in New York City. It begins with a base of one million cable subscribers in the metro area, and a partner—U S West—that is Nynex's Bell counterpart in 14 western states. Cable's most direct, across-the-board assault on telephony will involve wireless technology. Cable alliances are already bidding aggressively for radio licenses to provide wireless "personal communications services"—a new generation of wireless phone and data service. Telephony and cable TV are converging fast—in the digital world. The result: competition is coming to residential consumers too, sooner than they think.

REGULATION IS A STUMBLING BLOCK

And yet, for all the progressive changes already made, regulation remains the biggest impediment to competition and to the city's long-term interests. Think of information

as tomatoes. Some people grow them by the truckload. Others nurse a few little vines in their backyards. So what should government do: subsidize the backyard garden by jacking up tolls on the highways and railroads that the big growers need most? Or unleash the wholesalers and let them flood the market? What you like depends on where you live.

For New Yorkers, the choice should be clear. Informationally speaking, the city is an Everest of tomatoes. And the trouble for the city is that every government-mediated subsidy, entry-barrier, quarantine and tax favors the small vines, and obstructs the giant producers and exporters. Across the board, government telecom policy is aimed at promoting expensive, short-haul, small-town introverts, at the expense of cheap, long-haul, big-city extroverts. In the broadcast arena, it's called "localism." The FCC's whole approach to assigning TV and radio spectrum is designed to boost the power of a handful of local stations, thus obstructing the development of more than a handful of national networks.

For years, cable companies were

stymied in their efforts to import "distant" broadcast signals, the theory being that if Oshkoshians could watch the Yankees they might stop watching their very own Puddle Ducks. To this day, cable companies are still forced to pack channels with local TV broadcasts (a constitutional challenge is creeping through the courts), rather than use the same space for out-of-town fare. In other words, countless cable channels that could be opened in Aspen or Butte for Broadway or baseball from entertainment and business capitals like New York are strictly allocated to video fare from Aspen or Butte.

In telephony, the prices of long-haul calls are jacked up to subsidize the cheapest possible basic monthly rates for local service. And across the board, New Yorkers help subsidize basic phone service in rural areas, where the cost of providing service is far higher. The regulatory tax-and-spend policies that make this happen all go under the noble banner of promoting universal service. Billions of dollars are shuffled through telephony's intricate accounts to make this happen. New York loses more than anyone from such policies.



The paramount priority for New York is to project its influence outward, over the most advanced networks on the planet.

NEW YORK'S IMPERATIVES

For New York telecommunicators, the first, paramount objective is to slash the import-export duties. The price of long-distance phone calls has fallen sharply in the past decade, largely because regulators have slashed the "local access" charges that companies like AT&T pay to companies like Nynex to originate and terminate long-distance calls. There's more to slash. And the slashing must continue, even though that means cutting back subsidies to basic residential service.

New York's imperatives, in short, are very different from Oshkosh's or Butte's. The city largely solved the problem of local connection decades ago, by packing millions of people so tightly together that they could all connect by taxicab and lunch, when necessary. The job was finished more recently, when state regulators opened wide the city's local telecom markets; as a result, competition to haul bits under the streets of Manhattan is now the most vibrant in the world. Butte still has to worry, perhaps, about stringing subsidized wires out to the ranches ten miles out of town. But

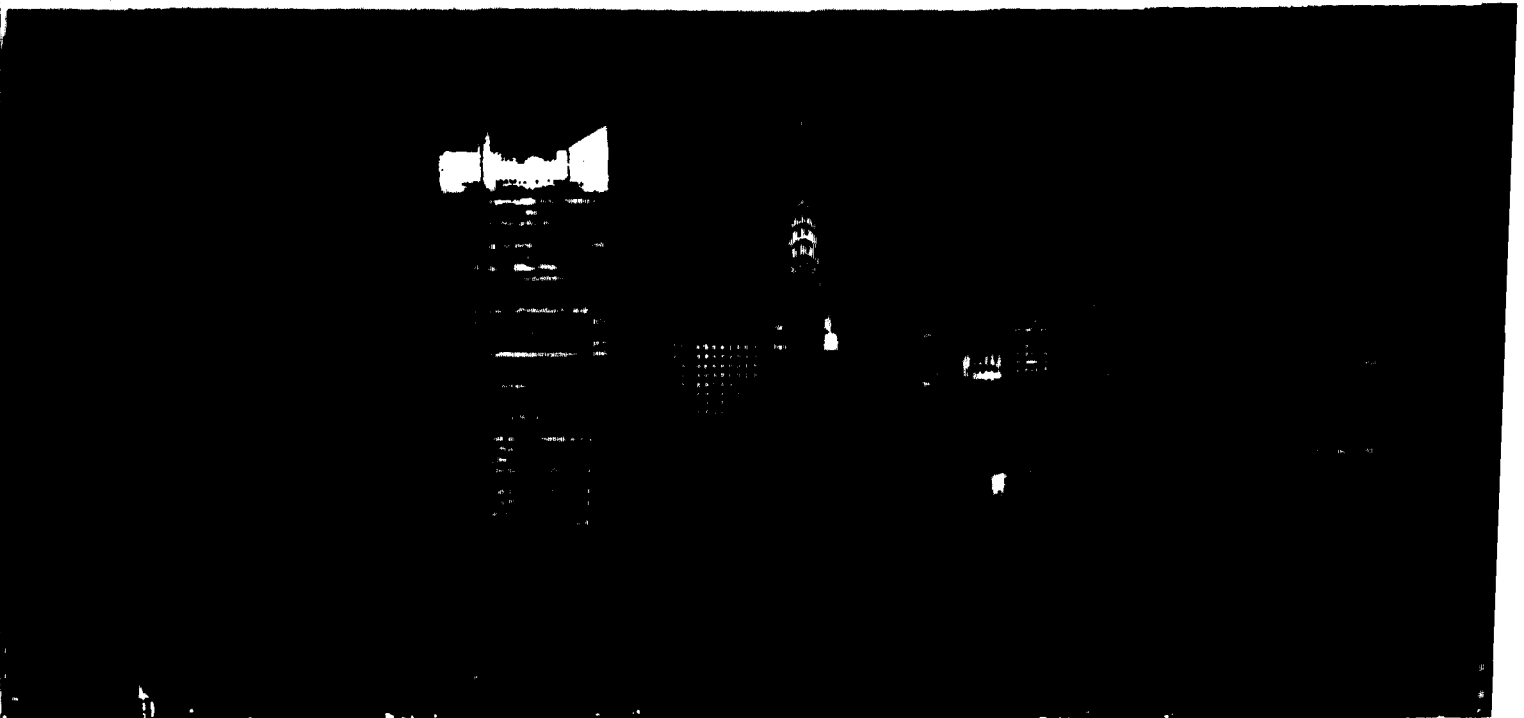
Gotham's most urgent priority is to extend its electronic reach to Butte, with the cheapest, most digital, most broadband, most interactive capabilities available—and then to double those capabilities the next year, and indefinitely into the future.

The paramount priority for New York's pastors and masters is to project the influence of those large businesses outward, over the most advanced, least taxed, least regulated, least quarantined networks on the planet. Unfortunately, it's almost impossible to get anyone very angry about localism or residential subsidies, or the unexciting fact that Sprint can hire Candice Bergen to tout long-distance services, but Nynex can't. Long-distance prices are lower than they were, getting them lower still just doesn't seem that urgent. New Yorkers are accustomed to—are comfortable with—the Steinberg-New Yorker view of the universe—Broadway and Fifth Avenue are big, detailed and self-contained; and what lies beyond to the west is only tiny, empty, fly-over country, with perhaps a couple of glimmers of light on the Pacific coast. That, however, is the

one view of things New York can no longer afford.

The fly-over country is now getting ready to do some overflying itself. Telemarketers and operators of 800 services already congregate in Omaha, known, rather unglamorously, as the "800-Number Capital of the World." Labor and real estate are cheap, and being on Central Standard Time is a significant advantage. The New York Stock Exchange is still biggest and best, but round-the-clock trading has powerful attractions, and London or Tokyo beckons. Again, the communications facilities are at hand to knit the traders altogether. The small investor in Oshkosh will never know the difference. New York, in other words, could yet become the fly-over. There is no escaping the fact that telecom technology flattens and decentralizes.

There is also no escaping the fact that it complements the centrifugal forces that already pull talent out from the heart of the city toward cheaper housing, safer streets, cleaner air, better schools and lower taxes. There is no getting away from the evolution of the Internet, what engi-



Peter Huber is a Forbes columnist, a senior fellow at the Manhattan Institute for Policy Research and the author of Orwell's Revenge: The 1984 Pallimpsest. A longer version of this article appeared in the Winter 1995 issue of the City Journal. The author has done consulting work for various Bell companies and other providers of telecommunications services.

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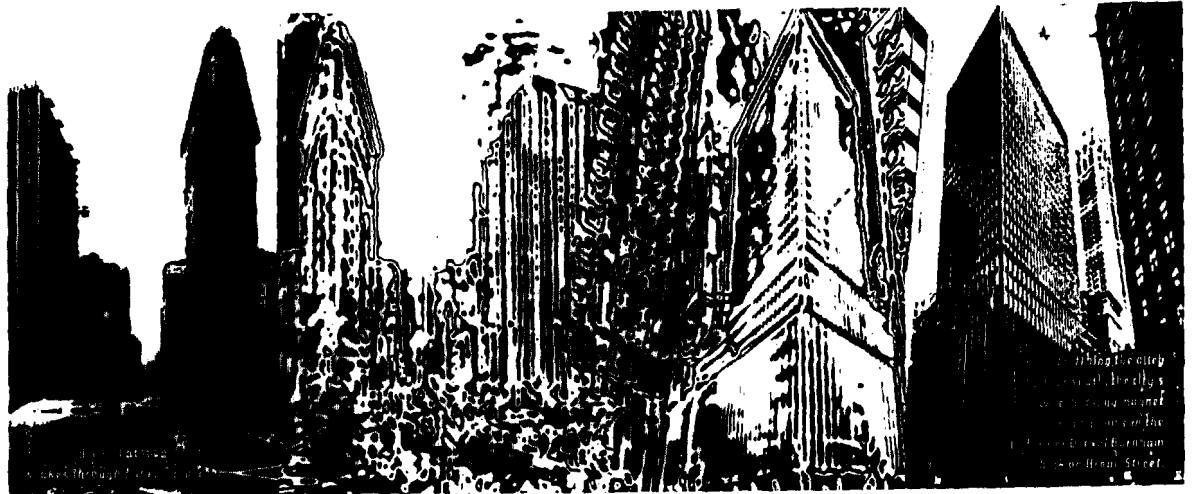
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If you wire it, will they come?

Until this month, 55 Broad Street in lower Manhattan was a hollow headstone for the Eighties. Empty since its last tenant, investment banking idol Drexel Burnham Lambert, consumed itself at the end of that rapacious decade, the steel-and-glass building has been rehabilitated, and its new occupants may bring a glimpse of the financial district's future. The former icon of high finance is now the New York Information and Technology Center (IT Center), a high-tech multimedia magnet.

The project's backers, which include the New York City Partnership, a nonprofit coalition of CEOs of companies and other city institutions, corporations (Con Edison, NYNEX, and IBM, among others), and educational institutions such as Columbia University, hope the building will foster a true multimedia district downtown, bringing Gotham up to speed in the race for technology—and bringing lower Manhattan back from the dead.

Following the collapse of the financial markets in the late Eighties, more than 30 million square feet of office space stood empty downtown. Developers despaired of ever converting their empty buildings for modern office or residential use. The city threw money at the problem, enticing businesses with tax abatements and special deals that ranged from high-stakes quid pro quo to a kind of theater of the absurd: The Mercantile and Commodities exchanges were persuaded to stay in New York with a \$200 million package that included new headquarters. However, those headquarters were designed without room for the Coffee, Sugar and Cocoa, or New York Cotton exchanges, which had previously pooled expenses and shared digs with Comex and the Merc—and which

subsequently signed an agreement to relocate to New Jersey.

Among early efforts to win the war of attrition downtown was the Association Center, a magnet building for not-for-profit companies at 120 Wall Street. Six years later, the center has 21 tenants renting less than half the space available. Carl Weisbrod, of the Alliance for Downtown New York, says that anything that helps diversify the market-tethered downtown economy is a step forward. But the center hasn't become the district-maker proponents had hoped it would be. Why, then, should the IT Center be any different?

Nonprofits have traditionally found their hub in Midtown, among their for-profit peers. So for them, Wall Street seems too far from the action. The IT Center, however, is a short distance from Silicon Alley, the area surrounding Broadway from the Flatiron district on down through Soho and Tribeca, where the city's fledgling multimedia community has begun to roost. And many of the financial services software companies in the city have already rooted themselves firmly in lower Manhattan, making the link from Soho to downtown virtually organic.

Industry districts fell out of favor when high-tech communications began to breed free-range employees and new work paradigms like the virtual office. Jonathan Rudes, at Rudes Realty Company, leasing consultant for the center, admits that there are those in nearly every industry who have begun to ask, "What do we need office buildings for? We have telephones."

But Rudes counters, "People still do business face-to-face." The need for "face time" may or may not endure as workers become more at home with high-tech ► 39

if you wire it...

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communications, but as the traditional rationale for industry districts grows hazy, a clear new reason for centralizing workers and businesses is emerging—and that's what the IT Center's backers are banking on.

Rudes and the center's other supporters have found a quirk of the high-tech revolution: The technology that has allowed most industries to spread out is drawing the companies that are beginning to produce interactive movies, cyber-advertisements, and virtual realities closer together. These companies often start out with just one or two creative employees, and few

have the capital to outfit themselves with state-of-the-art equipment. So they get together and share it.

Though the IT Center won't be reconfigured on a weekly or daily basis, as Douglas W. Nicholson, partner at New York's Workspace Research Group, believes many offices will be soon, he thinks the electronic infrastructure as a shared, tap-in resource is the kind of approach that makes the magnet building important. "They're reaching to make traditional office space work for these clients, but they're taking an intelligent, healthy step towards the kinds of places that will be most effective in the future."

The shared resources the IT Center will of-

fer its tenants include five separate telecommunications systems, each with a different purpose and bandwidth: one for digital video, interactive TV, or music; one for networks within the building; two for high-speed Internet access, including a T-1 line; and one for phone calls and the like.

What does all this cable really mean to a prospective IT tenant? "A T-1 line is in the \$6,000 range to set up, with a \$3,000-a-month premium," estimates Chris Bell at N2K Inc., a company that designs and builds on-line businesses and CD-ROMs, and which is in the process of signing a lease at the IT Center. "Here there are no setup charges, and your costs are \$1,000 per month or less," thanks to the friendly

rates from NYNEX. "Having a node on the network, and an Internet provider in the building, would be about \$100,000, plus staffing it. We're looking at a serious quarter of a million dollars in savings right out of the box, and it only goes up from there," says Bell.

Bradford Schmidt, CEO of Adware Inc., concurs; his company plans to move into the IT Center this year. Adware designs and builds high-end World Wide Web sites, and not only is the IT building "hot shit" for them from a technological standpoint, the rents are competitive. Under the mayor's plan for lower Manhattan, which has been passed by the City Council and is on the State Senate's slate for this fall, tenants will benefit from a package of real estate and commercial rent tax breaks over a six-year period. The lowest rents in the IT Center will be approximately \$15 per square foot—less than Schmidt's company pays for back-office space in Seattle's Westin Building, another high-tech magnet.

Rudin Management, owner of the building, has also committed to offering flexible lease options to its tenants, since young high-tech companies, often small and volatile, frequently find their needs for space changing before long-term leases run out. The management firm also says it and other participants have already invested \$20 million in the project in order to help keep rents down and infrastructure top-notch. The first tenants will move into the building's 9th, 10th, and 11th floors this month, just four months after the mayor's office announced the center.

In an effort to make the financial district more hospitable to artists, the renovators will nudge the nature of the former Drexel building toward Tribeca. "There will be no dropped ceilings," says Wesley Rudes of Rudes Realty. All of the windows in the building will open, a rarity in the financial district, which favors stationary panel windows.

The technical benefits, however, are the big draw. "I wasn't thrilled with the Wall Street location at first," says Bell at N2K, "but with this infrastructure, it could be on Mars and I'd move there."

That kind of comment has made the project's developers very optimistic. And they have given themselves plenty of room to grow: There are some 2 million square feet of empty office space in buildings on the IT Center's block. Are these other buildings suited to similar renovation? "Our building, theoretically, could be done anywhere—it's just a question of cost," says William Rudin, president of Rudin Management.

And will their landlords be willing to make the capital investment necessary to draw high-tech tenants, or be flexible enough to keep them? After paying steep real estate taxes on empty buildings for years, says Wesley Rudes, "if we fill this building up, and we ask them, 'Do you want us to fill yours up, too?' They'll say, 'Yes.'" ANDREA COLLIER



The Chairs: VT, Allura, and NSX

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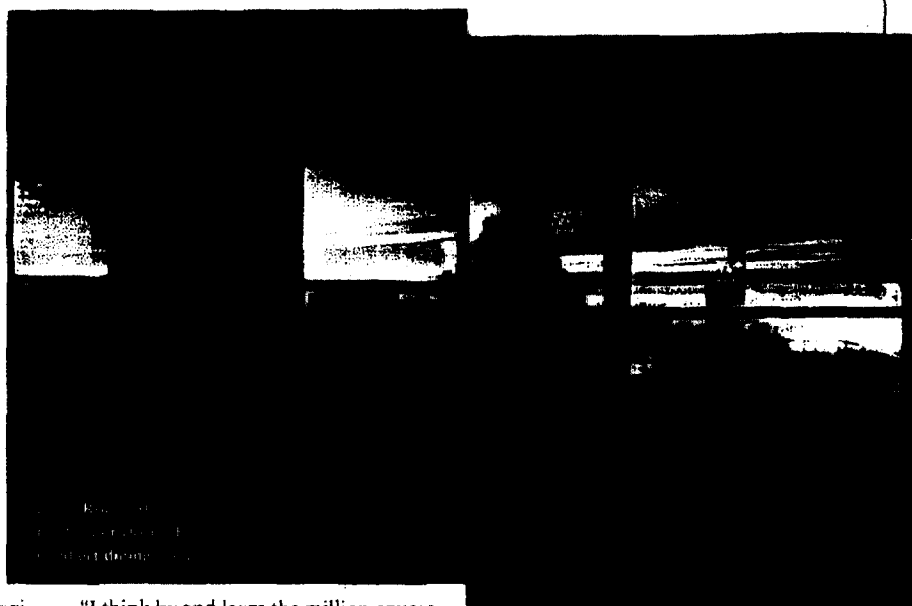
21st-Century Lofts

It's the twilight of the skyscrapers, but city developers are reinventing them as apartment houses—yesterday's boardrooms make splendid bedrooms.

HAVE ALWAYS THOUGHT OF THE 52-story Gulf+Western building as an annex to the Columbus Circle subway station, an overgrown kiosk marking the stairway to the IND. It is not a skyscraper I ever stopped to admire; I just scuttled through its ever-present sidewalk sheds, there to protect pedestrians from the windows that popped out when the unusually lithe building twisted in the wind.

Now this office tower, built in 1969, has been stripped down to its girders, clad in gold and black glass, and adorned with the superlatives that signal the presence of developer Donald Trump. One Central Park West (née Seven Columbus Circle) is, according to the sign, "the most important new address in the world." And the tower has been cured of "excessive lateral movements" by the engineering firm Cantor Seinuk. Trump informs me that it is "the most rigid residential building in New York."

The Gulf+Western building's makeover into a complex of luxury condominium apartments (the cheapest has an asking price of \$840,000) and hotel rooms now called the Trump International Hotel & Tower suggests another superlative. It is the first modern office high-rise to be converted into housing. This gussied-up slice of modernism signals the end of the skyscraper as the great project of the twentieth century. (The project, it should be noted, has migrated to Asia, where the world's tallest pair of towers is currently under construction in Kuala Lumpur, Malaysia.) The residential conversion of the Gulf+Western tower embodies all the changes in technology and ways of doing business that are having a profound impact on the urban landscape. By now, the list is a familiar one: Downsizing, automation, telecommuting, and the relocation of back offices to remote office parks increasingly conspire to make the modern office building superfluous. As nineteenth-century industrial buildings, empty and obsolete, were turned into residential lofts during the sixties, seventies, and eighties, now office buildings, vestiges of twentieth-century routines and values, will be reinvented.



"I think by and large the million-square-foot office building, especially clusters of them, are completely dinosaurs now. I don't think there's any reason why we'd ever see them again," argues Kenneth Greenberg, an architect who spent a decade as director of urban design in Toronto, where 1,000 apartments have been carved out of unoccupied office buildings.

Admittedly, the significance of Trump's newest tower (which contains almost 550,000 square feet) is largely totemic. The real *fin de siècle* drama is being played out at Manhattan's southern tip. Walk through the financial district, and abstract prognostications about the changing nature of corporations and work are demonstrated in vivid tableaux. Inside the depopulated lobby of 60 Broad Street, a blocky 39-story building dating from the early sixties, the directory is almost bare. The only listings are under *K* for Kidder, Peabody, the last tenant. This building is the financial-district equivalent of a haunted house. Here lurk ghosts of the 1987 stock-market crash and crooked Ivan Boesky deals. Here Drexel Burnham Lambert, which once occupied most of the building, went bankrupt in 1990. The landlord, Olympia & York, after its own collapse, was forced to hand the building over to Hong Kong billionaire Li Ka-shing, who plans to fill the top twenty stories with 300 apartments.

Lower Manhattan contains roughly 100 million square feet of office space. As much as 25 percent of that space is vacant. To revive the neighborhood, the city, in cooperation with the Alliance for Downtown New York, a business-improvement district headed by Carl Weisbrod, has begun offering a menu of property-tax exemptions and abatements and relaxed zoning laws designed to prod developers into converting older office buildings into residences.

Along the oddly angled streets of the financial district, it feels as if the clock stopped sometime in 1950. Blocks where the only retail businesses are Irish bars with names like Cassidy's Liquid Assets are redolent of a time when work was for men in flannel suits who rode the bar car home. The veneer of hipness that coats many quarters of the city has passed Wall Street by. Still, politicians, planners, and boosters dream of transforming this area into another SoHo, TriBeCa, or Flatiron district.

"The vision," says City Planning director Joseph B. Rose, "is a 24-hours-a-day, mixed-use environment that provides a level of amenity that lower Manhattan just never had before." To this end, Tony Goldman, a real estate developer known for his properties in SoHo and Miami's South Beach, is planning to open a restaurant in the former headquarters of the American